

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P243730

Luminaire Tested: **S125RDR-H610D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243730  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-66)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H610D927-X4F0-XX-UDD-F-W  
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 2700K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1764.8 lumens  
Efficiency: N/A  
Efficacy: 102.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26  
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')  
CIE Type: Direct

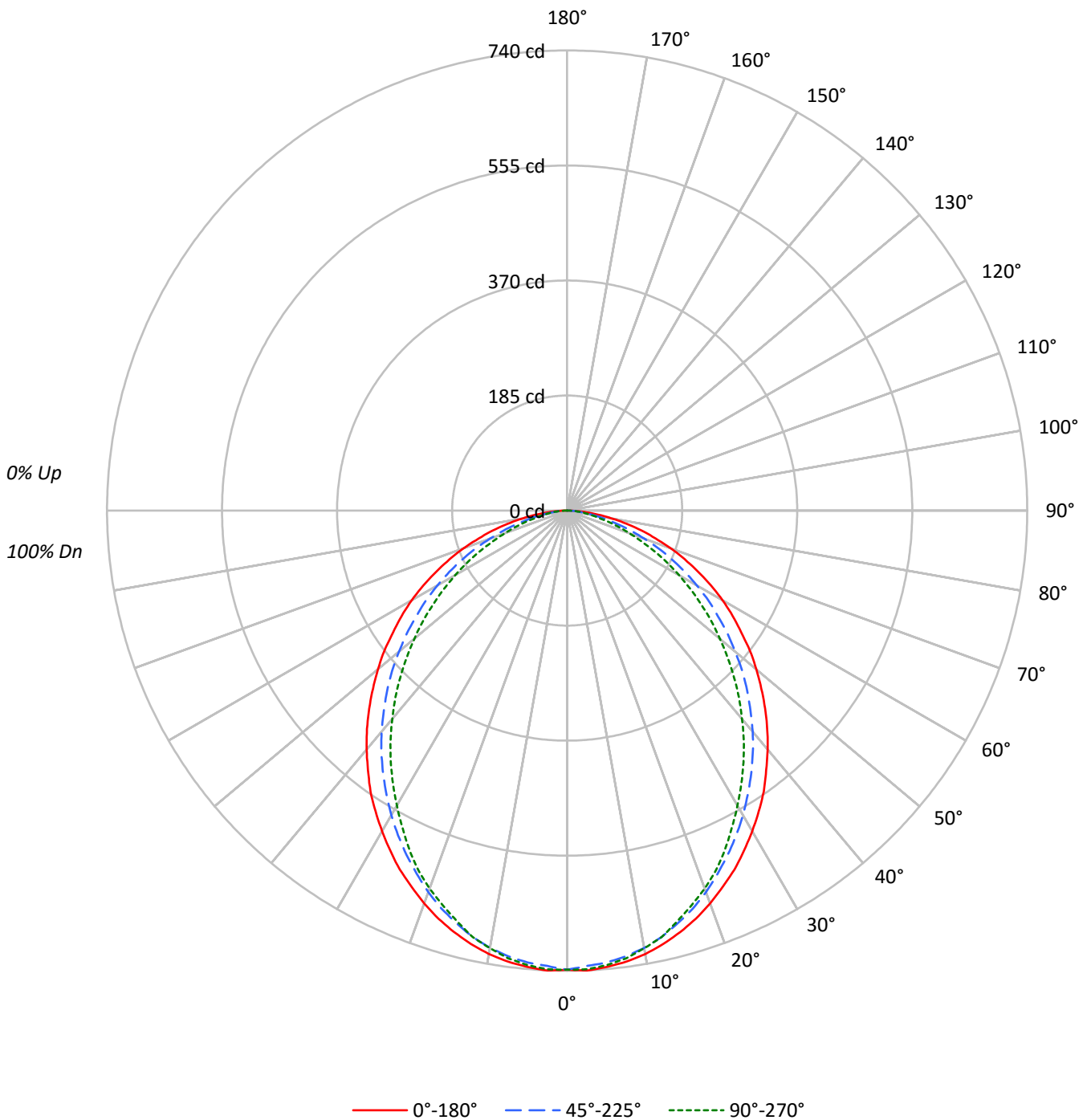
Input Watts (W): 17.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5247	5247	5247
5°	5256	5204	5234
10°	5226	5153	5157
15°	5165	5056	5032
20°	5085	4937	4894
25°	4995	4792	4713
30°	4885	4642	4495
35°	4784	4477	4289
40°	4655	4307	4057
45°	4523	4114	3816
50°	4392	3901	3545
55°	4234	3665	3259
60°	4107	3423	2951
65°	3908	3135	2612
70°	3689	2743	2228
75°	3394	2290	1812
80°	2984	1772	1490
85°	2544	1468	1378



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.5	3.9
10°-20°	194.8	11.0
20°-30°	283.4	16.1
30°-40°	324.6	18.4
40°-50°	317.6	18.0
50°-60°	268.2	15.2
60°-70°	187.8	10.6
70°-80°	95.4	5.4
80°-90°	23.5	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	547.8	31.0
0°-40°	872.4	49.4
0°-60°	1458.2	82.6
0°-90°	1764.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1764.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	738	738	738	738	738	
5°	737	735	729	734	734	70
15°	702	699	687	687	684	198
25°	637	630	611	605	601	293
35°	551	538	516	501	494	344
45°	450	435	409	388	380	347
55°	342	327	296	272	263	307
65°	232	214	186	163	155	230
75°	124	108	83	70	66	131
85°	31	20	18	17	17	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	738.3	738.3	738.3	738.3	738.3
2.5°	740.4	738.9	733.0	738.3	738.3
5°	736.7	735.2	729.4	734.1	733.6
7.5°	731.5	729.9	723.0	727.8	726.2
10°	724.1	722.0	714.0	716.7	714.6
12.5°	714.0	711.9	702.4	703.5	702.4
15°	701.9	699.2	687.1	686.6	683.9
17.5°	688.2	684.5	671.3	669.7	665.4
20°	672.3	667.6	652.8	649.6	647.0
22.5°	654.4	649.6	632.2	627.4	625.8
25°	636.9	629.5	611.0	604.7	601.0
27.5°	616.3	607.9	588.9	580.4	574.1
30°	595.2	585.7	565.6	554.5	547.7
32.5°	573.6	562.5	540.8	527.1	521.3
35°	551.4	538.2	516.0	500.7	494.3
37.5°	526.0	512.8	490.6	472.7	466.9
40°	501.7	488.0	464.2	444.7	437.3
42.5°	476.4	462.1	436.2	415.6	409.3
45°	450.0	435.2	409.3	387.6	379.7
47.5°	423.6	408.8	381.8	360.2	350.2
50°	397.2	381.3	352.8	330.6	320.6
52.5°	370.7	353.3	325.3	301.6	292.6
55°	341.7	326.9	295.8	272.0	263.0
57.5°	315.8	299.5	269.9	245.6	235.5
60°	288.9	270.9	240.8	217.1	207.6
62.5°	260.4	242.4	213.4	189.6	181.1
65°	232.4	214.4	186.4	163.2	155.3
67.5°	204.4	187.5	159.5	137.8	128.9
70°	177.5	160.0	132.0	112.5	107.2
72.5°	148.9	135.2	107.2	89.8	85.6
75°	123.6	108.3	83.4	69.7	66.0
77.5°	97.7	82.9	61.8	52.3	49.1
80°	72.9	60.2	43.3	37.5	36.4
82.5°	50.2	38.0	28.5	27.5	26.9
85°	31.2	20.1	18.0	16.9	16.9
87.5°	13.2	8.5	8.5	7.9	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)